

[95] WHAT IS CLAIMED IS:

1. A method of detecting a firearm shot, comprising:

providing a firearm shot detection system to sonically detect a firearm shot, the firearm shot detection system including one or more sonic sensors to sonically sense frequencies representative of the firearm shot and transmit signals in response to the firearm shot; electronics to process the signals;

providing the firearm shot detection system in a location where firearm shots are prone to occur;

first sonically sensing with said one or more sensors a characteristic frequency or frequencies representative of a bang of a gunpowder explosion from the firearm shot and transmitting a signal or signals in response to the firearm shot to the electronics;

second sonically sensing with said one or more sensors a characteristic frequency or frequencies representative of a crack of a bullet breaking the sound barrier from the firearm shot and transmitting a signal or signals in response to the firearm shot to the electronics;

processing the signals in response to the bang of a gunpowder explosion and the crack of a bullet breaking the sound barrier with the electronics and determining that the firearm shot occurred if the signals represent the bang of a gunpowder explosion and the crack of a bullet breaking the sound barrier;

initiating an alarm if the signals represent the bang of a gunpowder explosion and the crack of a bullet breaking the sound barrier.

2. The method of claim 1, further including detecting a flash of exploding gases exiting a barrel of a firearm that fired the firearm shot, and initiating the alarm only if the signals represent the bang of a gunpowder explosion and the crack of a bullet breaking the sound barrier, and the flash of exploding gases exiting the barrel of the firearm is detected.
3. The method of claim 1, wherein the firearm shot detection system further includes a camera to obtain one or more images of a perpetrator of the firearm shot, and initiating an alarm includes obtaining one or more images of the perpetrator of the firearm shot with the camera.
4. The method of claim 1, further including transmitting the one or more images of the perpetrator of the firearm shot to one or more remote entities.
5. The method of claim 3, wherein the camera is a video camera.
6. The method of claim 3, wherein the camera is an infrared video camera.
7. The method of claim 3, wherein the perpetrator of the firearm shot is monitored in real-time using the camera.

8. The method of claim 3, wherein the perpetrator of the firearm shot is recorded using the camera.
9. The method of claim 3, wherein the one or more images of the perpetrator of the firearm shot are transmitted to the one or more remote entities over the internet and the one or more entities include at least one of an internet phone and an internet device for receiving and viewing the transmitted one or more images of the perpetrator of the firearm shot.
10. The method of claim 1, wherein the firearm shot detection is not mobile.
11. The method of claim 1, wherein the firearm shot detection is mobile.
12. A method of detecting a firearm shot, comprising:
 - providing a firearm shot detection system in a location where firearm shots are prone to occur;
 - detecting with the firearm shot detection system a bang of a gunpowder explosion from the firearm shot;
 - detecting with the firearm shot detection system a flash of exploding gases exiting a barrel of a firearm that fired the firearm shot;
 - detecting with the firearm shot detection system a crack of a bullet breaking the sound barrier from the firearm shot;

initiating an alarm with the firearm shot detection system based on the detection of the bang of the gunpowder explosion from the firearm shot, the flash of exploding gases exiting the barrel of the firearm that fired the firearm shot, and the crack of the bullet breaking the sound barrier from the firearm shot.

13. A method of detecting a firearm shot, comprising:

providing a firearm shot detection system in a location where firearm shots are prone to occur;

performing with the firearm shot detection system at least two of the following three steps to determine whether a firearm shot occurs:

first, detecting a bang of a gunpowder explosion from the firearm shot;

second, detecting a flash of exploding gases exiting a barrel of a firearm that fired the firearm shot;

third, detecting a crack of a bullet breaking the sound barrier from the firearm shot;

initiating an alarm if at least two of the above three steps occur.